R E P O R T R E S U M E S

ED 017 699 08 VT 004 464

TEACHER INSTRUCTIONS FOR VOCATIONAL TALENT EXERCISES.

GEORGE WASHINGTON UNIV., WASHINGTON, D.C.
REPORT NUMBER BR-5-0061 PUB DATE 65
CONTRACT OEC-5-85-023
EDRS PRICE MF-$0.25 HC-$0.68 15P.

DESCRIPTORS- *TEACHING GUIDES, *VOCATIONAL APTITUDE, *MECHANICS (PROCESS), APTITUDE TESTS, VISUAL DISCRIMINATION, ABSTRACT REASONING, READING COMPREHENSION, JUNIOR HIGH SCHOOLS, *PREVOCATIONAL EDUCATION,

THIS BOOKLET WAS DEVELOPED IN A CURRICULUM PROJECT, DESCRIBED IN VT 004 454, TO HELP YOUNG PEOPLE LEARN BASIC PRINCIPLES AND CONCEPTS OF MECHANICS AND TECHNOLOGY AND THUS RAISE THEIR TRAINABILITY LEVEL. IT IS FOR USE BY THE TEACHER WITH FOUR WORKBOOKS, "VOCATIONAL TALENT EXERCISES," PART A (VT 004 458), PART B (VT 004 459), PART C (VT 004 460), AND PART D (VT 004 462). IT PROVIDES INSTRUCTIONS FOR USING THE WORKBOOKS TO TRAIN YOUNG PEOPLE IN THE PRINCIPLES AND CONCEPTS WHICH ARE OFTEN TESTED ON APTITUDE TESTS. ALSO INCLUDED ARE CUTOUTS FOR USE IN PART A, EXERCISE 3. OTHER RELATED DOCUMENTS ARE VT 004 455 THROUGH VT 004 471. (EM)

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TEACHER INSTRUCTIONS

FOR

VOCATIONAL TALENT EXERCISES

The George Washington University
School of Education
Education Research Project
Washington, D.C.
1965

VT004464

TEACHER INSTRUCTIONS
FOR
VOCATIONAL TALENT EXERCISES

Introduction

The Vocational Talent Exercises are an important part of the curriculum material to teach the basic skills of abstract reasoning, visualization in two and three dimensions, mechanical reasoning, and basic electricity. The other parts of the curriculum include supplementary readers and laboratory exercises in basic mechanical and electrical principles. Each of these materials is described in detail in the brochure about the project entitled "Development of a Curriculum and Materials for Teaching Basic Vocational Talents."

Purpose

The primary purpose of the Vocational Talent Exercises is to help raise the trainability level of youth who have consistently scored in the lower percentile ranks on aptitude tests. The low scores indicate that the probability of success in vocational and technical training is marginal. Those who score low, therefore, are usually unable to take full advantage of their vocational and technical training opportunities.

The usefulness of these exercises is not limited to students who score poorly in basic vocational tests. Any student should profit from studying the exercises. However, low scorers have more to learn than the others.

Arrangement of Exercises

The exercises are designed to provide one class instruction period per week. The format of the material for a particular subject matter area is similar to that of current aptitude tests. Answers are given at the end of each exercise.

There are a total of thirty Vocational Talent Exercises in this series. The table on the next page shows how they are divided by types of material and booklet. The first two booklets (Part A and Part B) are intended to be used during the first semester and the second two (Part C and Part D) during the second semester.

Types and Number of Exercises in Vocational Talent Exercise Booklets

Type of Material	Booklets Part A	Part B	Part C	Part D	Total
Abstract Reasoning	2	2	2	2	8
Visualization in Two Dimensions	2	1	0	0	3
Visualization in Three Dimensions	2	2	2	1	7
Mechanical Reasoning	0	3	1	3	7
Basic Electricity and Electronics	0	1	2	2	5
Total	6	9	7	8	30

Conduct of the Class

In general, no further instructions are required other than those contained in these booklets. Teachers are encouraged to stimulate class discussion and to feel free to innovate ways to explain principles and to use other illustrations where appropriate. The use of the blackboard to illustrate various ideas and rules may be helpful. Paper cutouts are attached to this brochure for use of the teacher to illustrate the examples and items in Exercise 3. In some of the Visualization in Two Dimensions exercises it may be advisable to draw the figure on cardboard or a sheet of paper to demonstrate rotation.

It is suggested that in many cases there may be as much learning accomplished in discussing why the incorrect answers are wrong as why the correct answer is right.

If time permits during any class period, exercises may be repeated again for review.

This series of exercises is experimental. The observations and suggestions of teachers and others which will help to make these exercises more useful and the instructions more meaningful would be appreciated.

Review of Previous Lessons

During each class period it is recommended that the students review the previous lesson in the similar material before undertaking a new one. This review should be controlled by the teacher and should take no longer than 10 or 15 minutes. If the class as a whole does not understand any particular exercise, it may be necessary to review it in class. You should use your own best judgment in pacing the students through the series. If a student does not understand a principle, it may be necessary to go over it with him individually.

Booklets Assigned to Individuals

The booklets should be assigned to individual students. The booklet in use should be handed out at the beginning of the period and taken up at the end. When reviews are called for, then it may be that the previous booklet may be handed out also. When the course is completed, it is requested that all the booklets be returned to The George Washington University, Education Research Project, for analysis of the responses and plotting of learning curves.

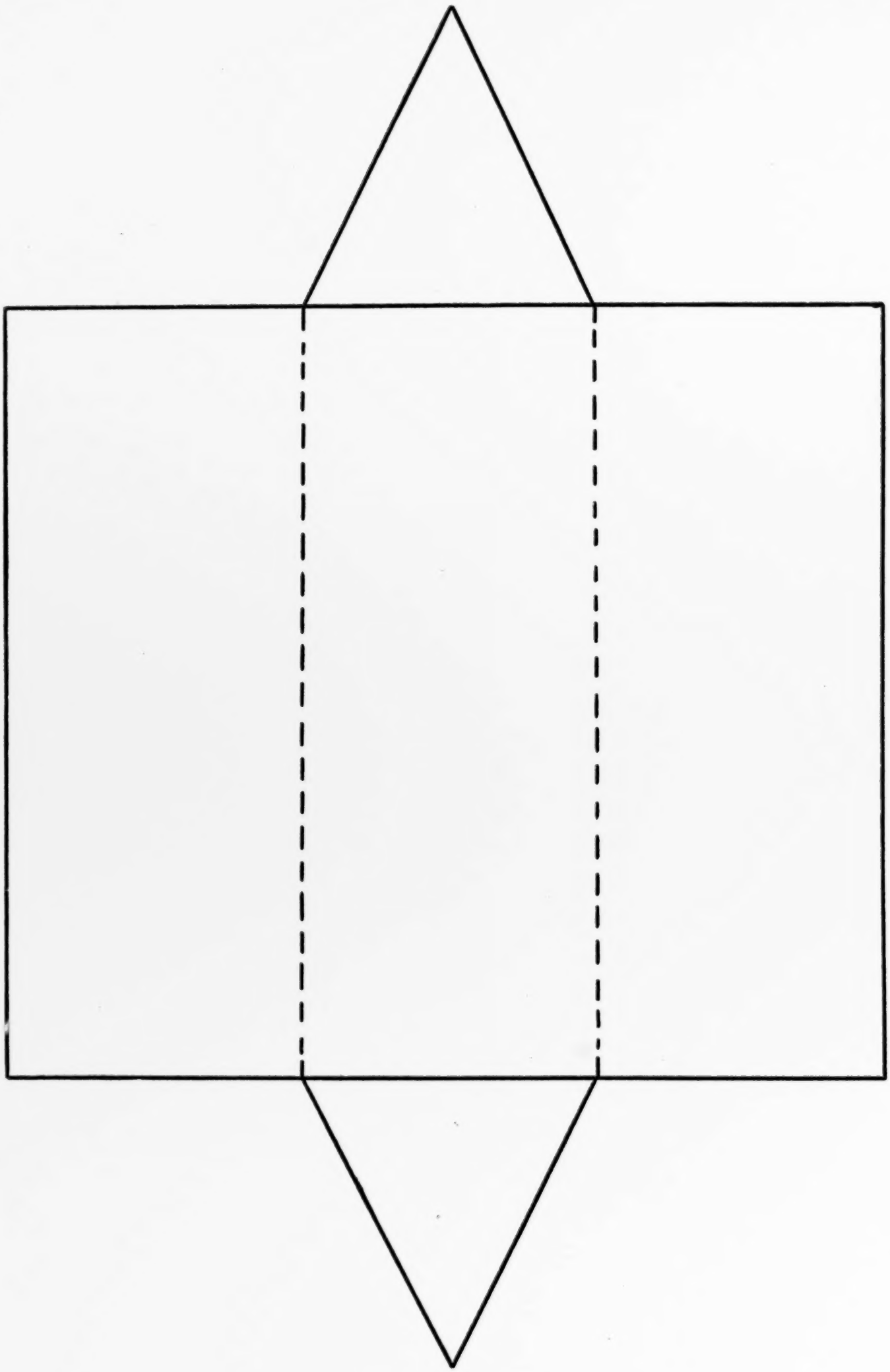
CUTOUTS

FOR

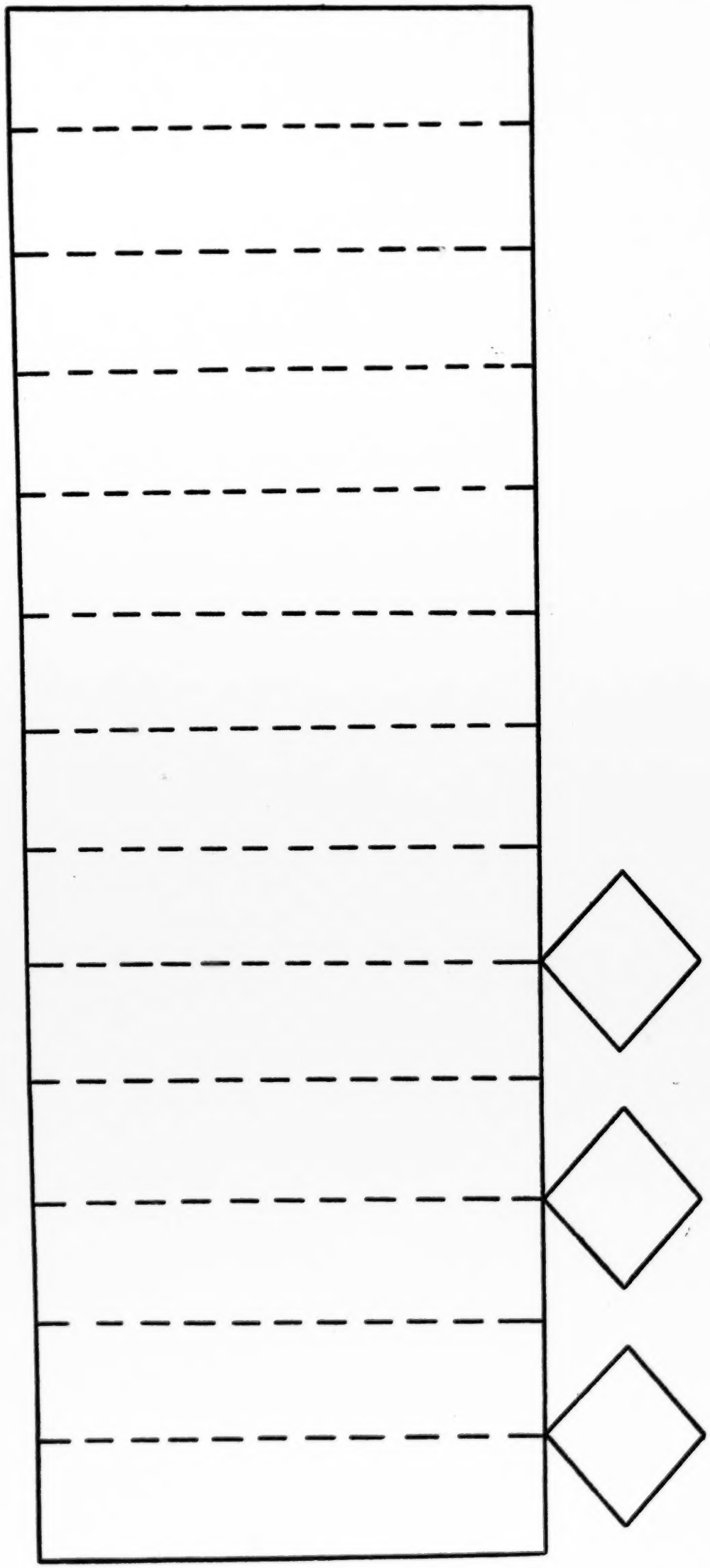
EXERCISE 3

INSTRUCTIONS:

Cut along solid black lines
and fold along dotted lines.



Item 1, page 3-5



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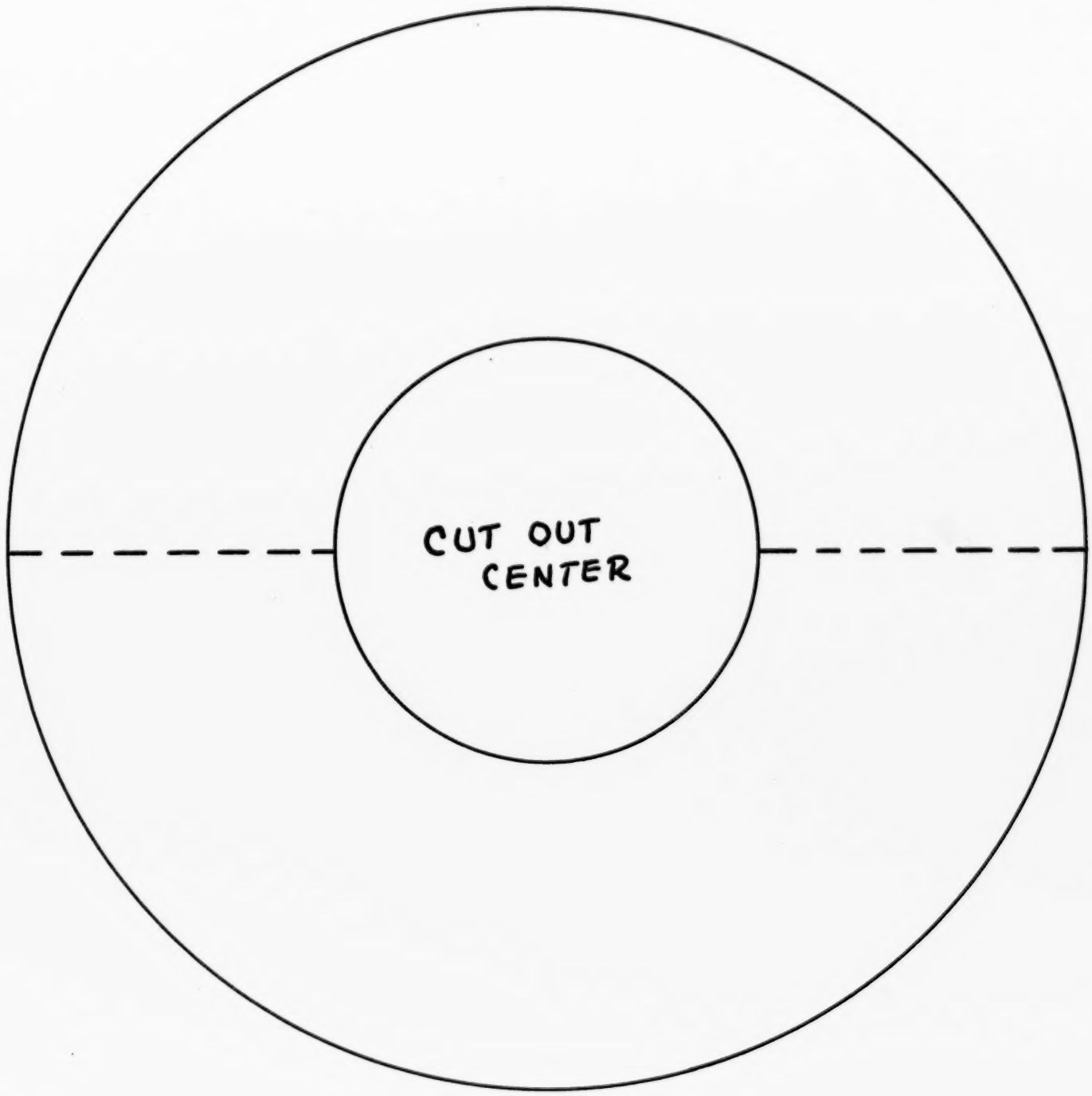

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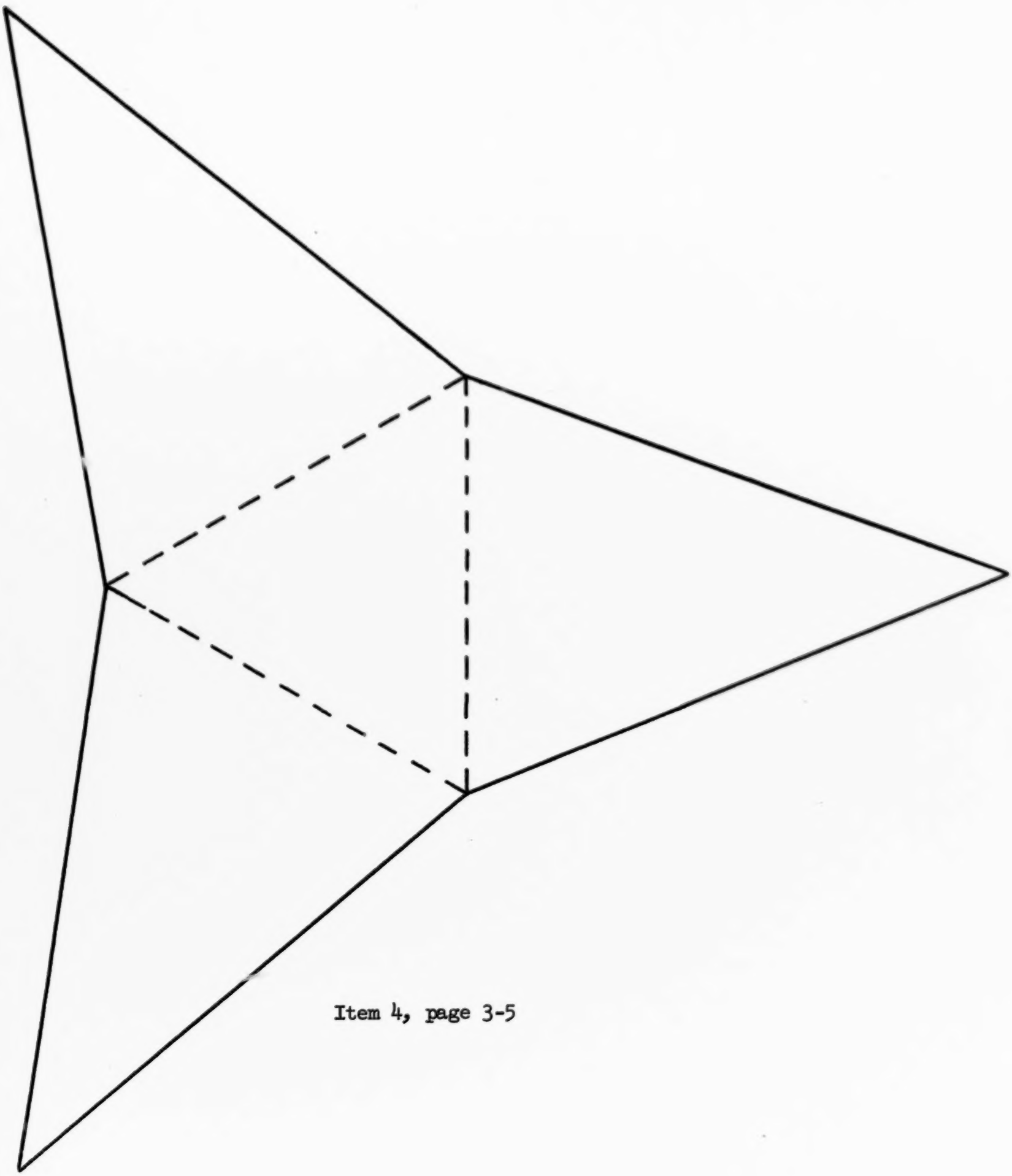

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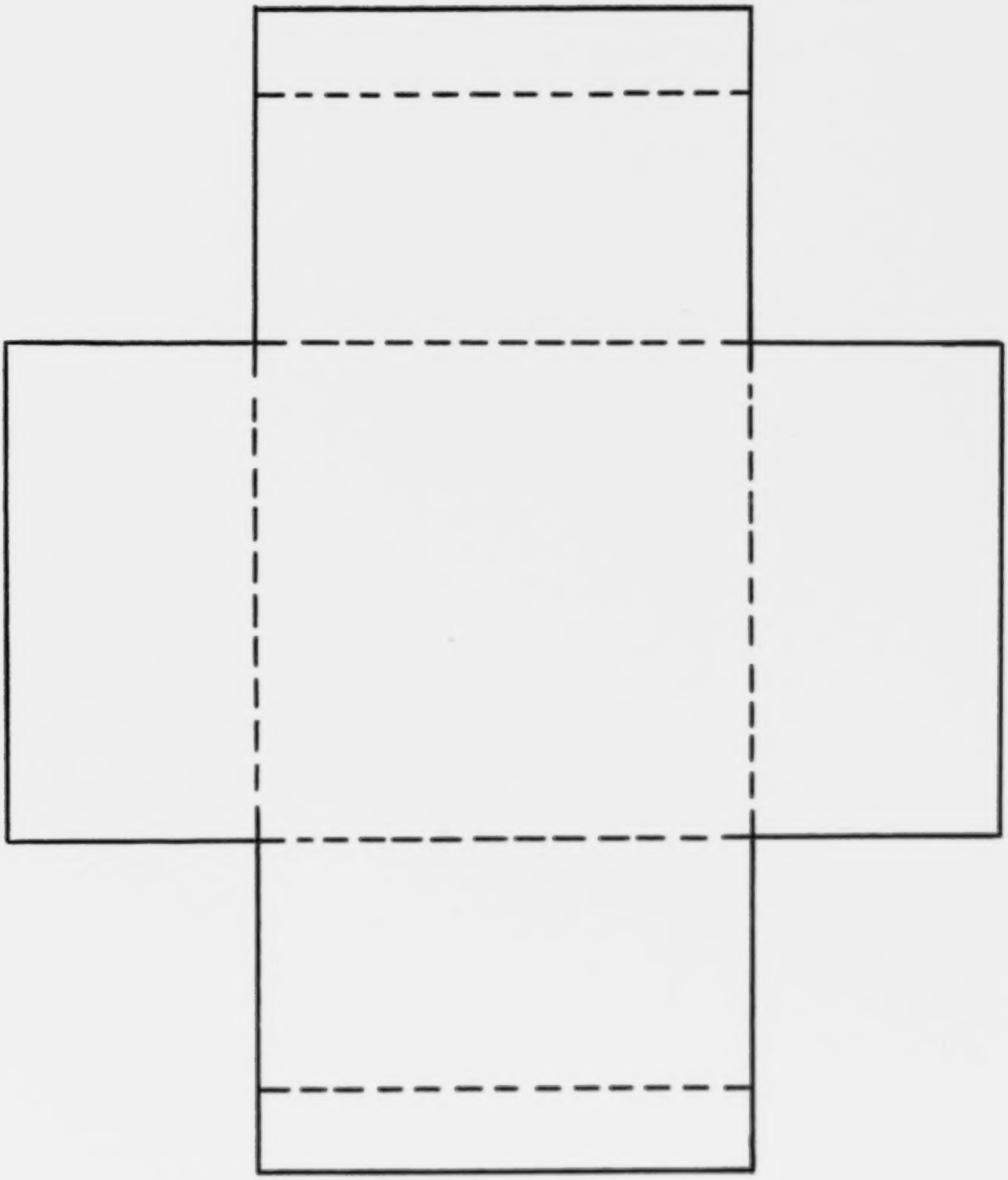

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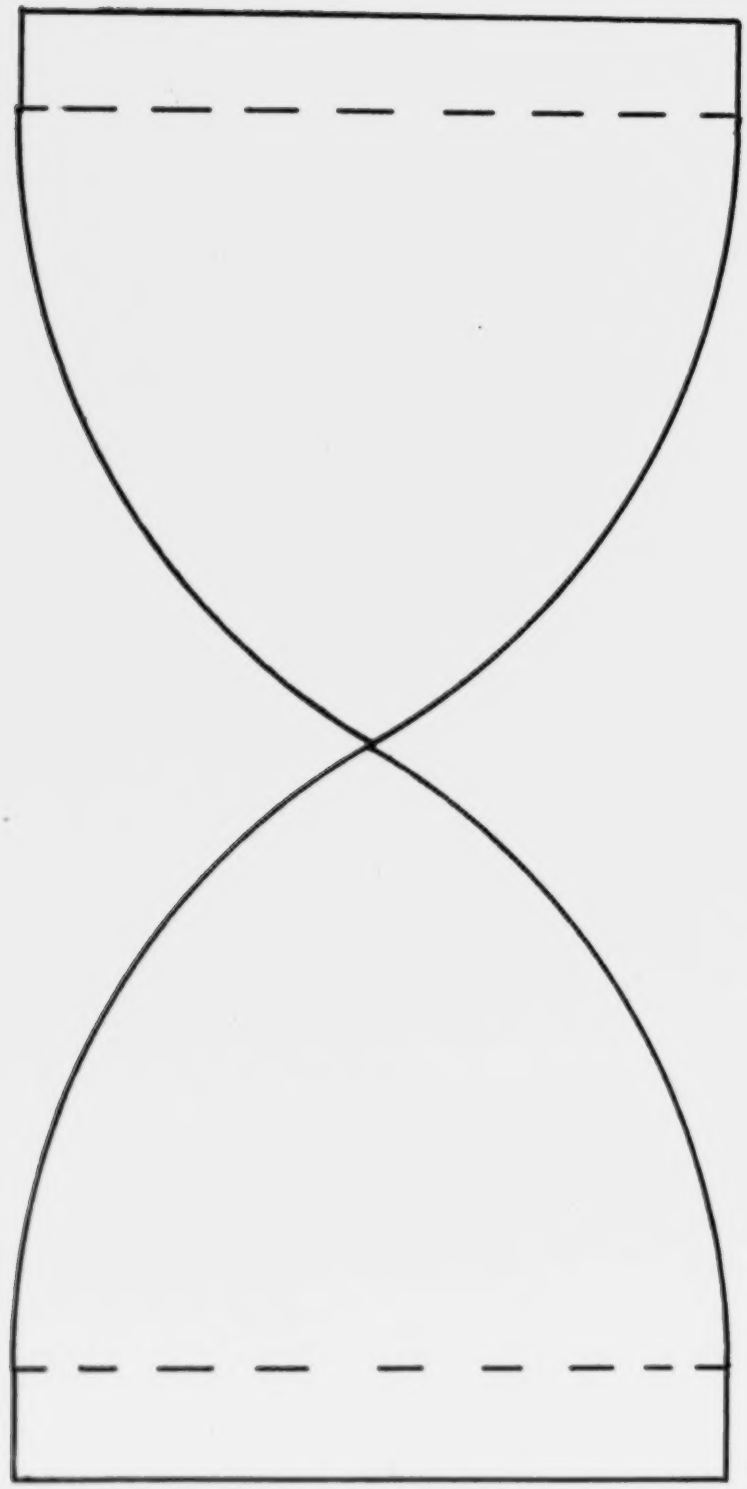

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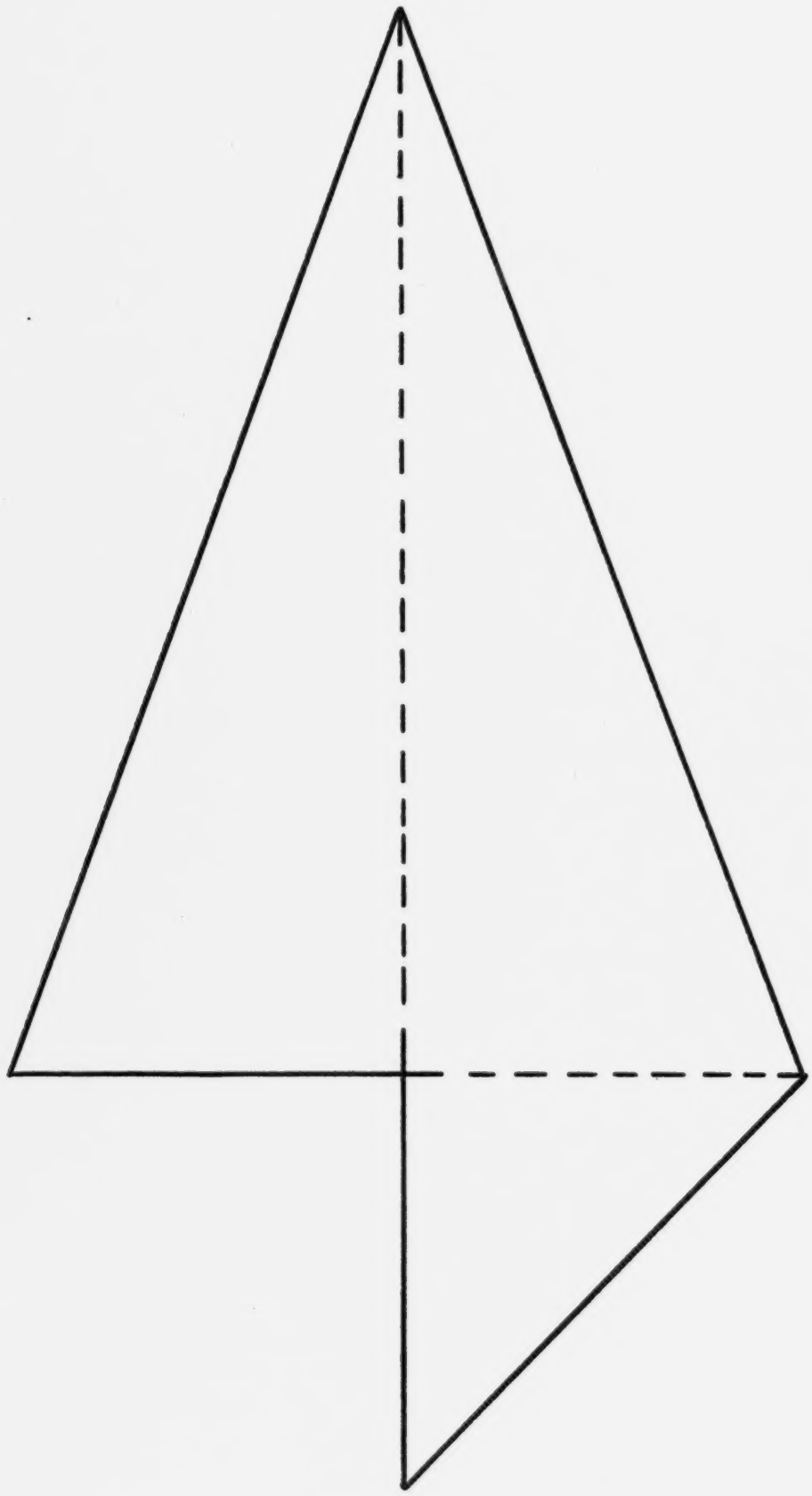

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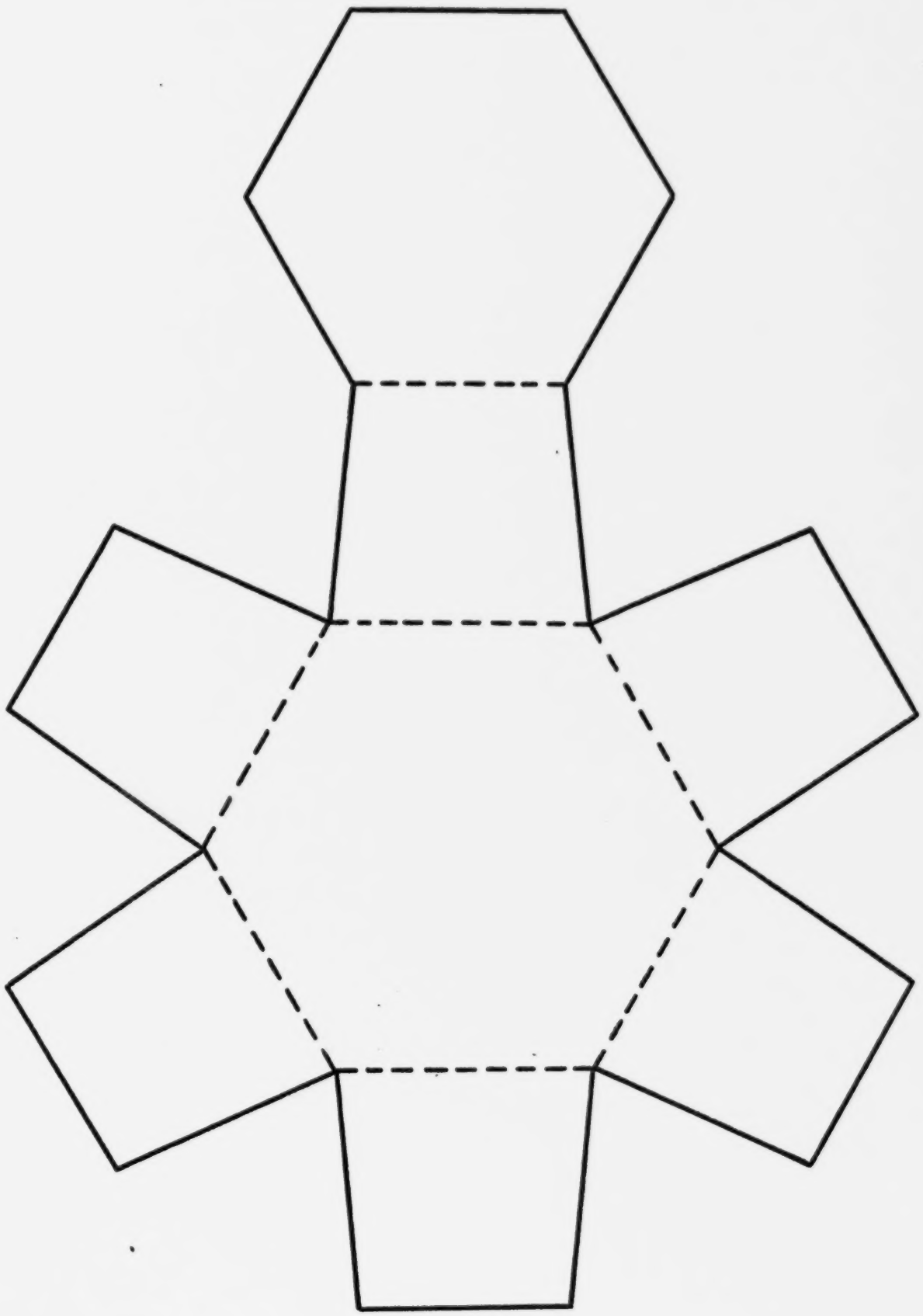

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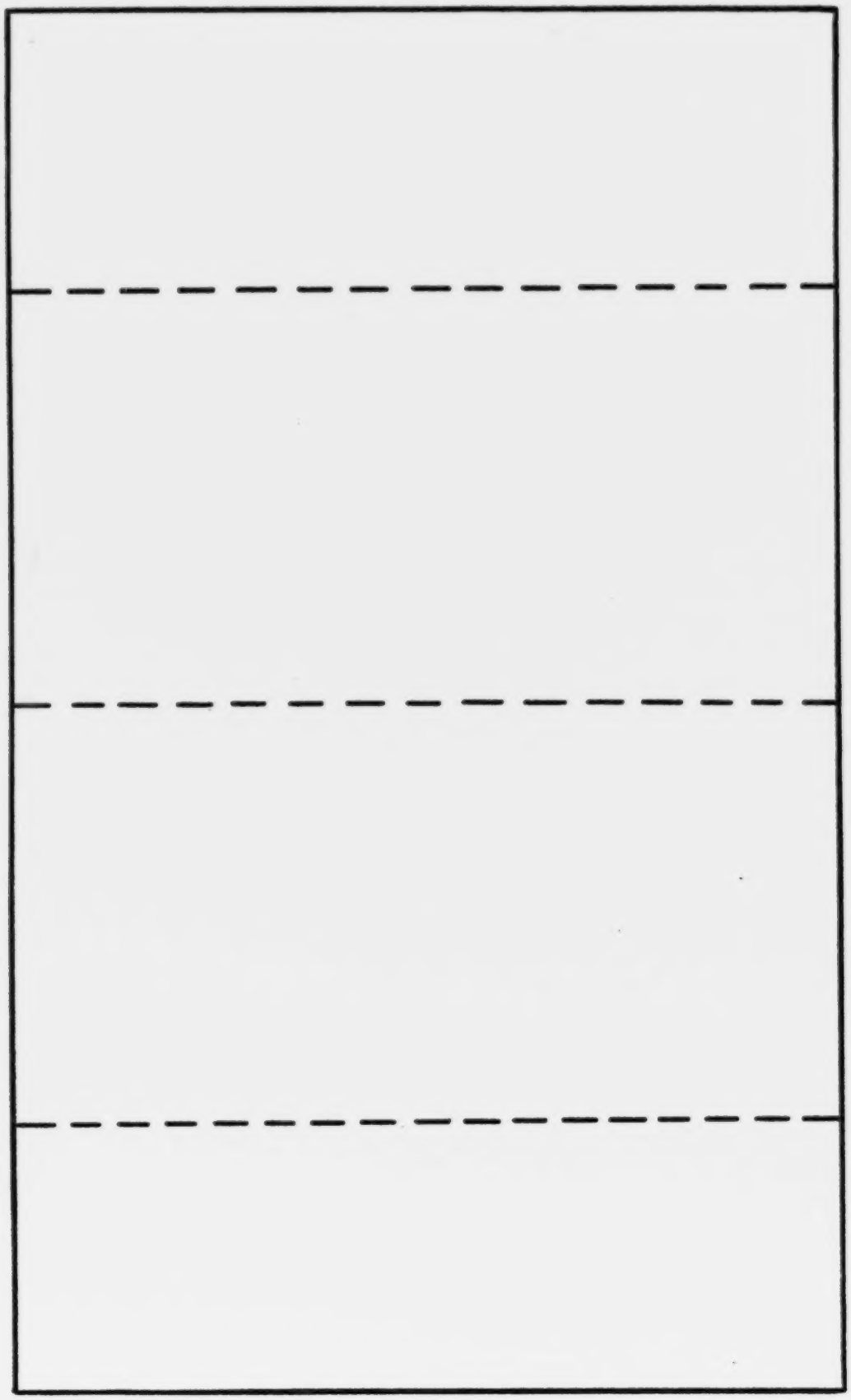

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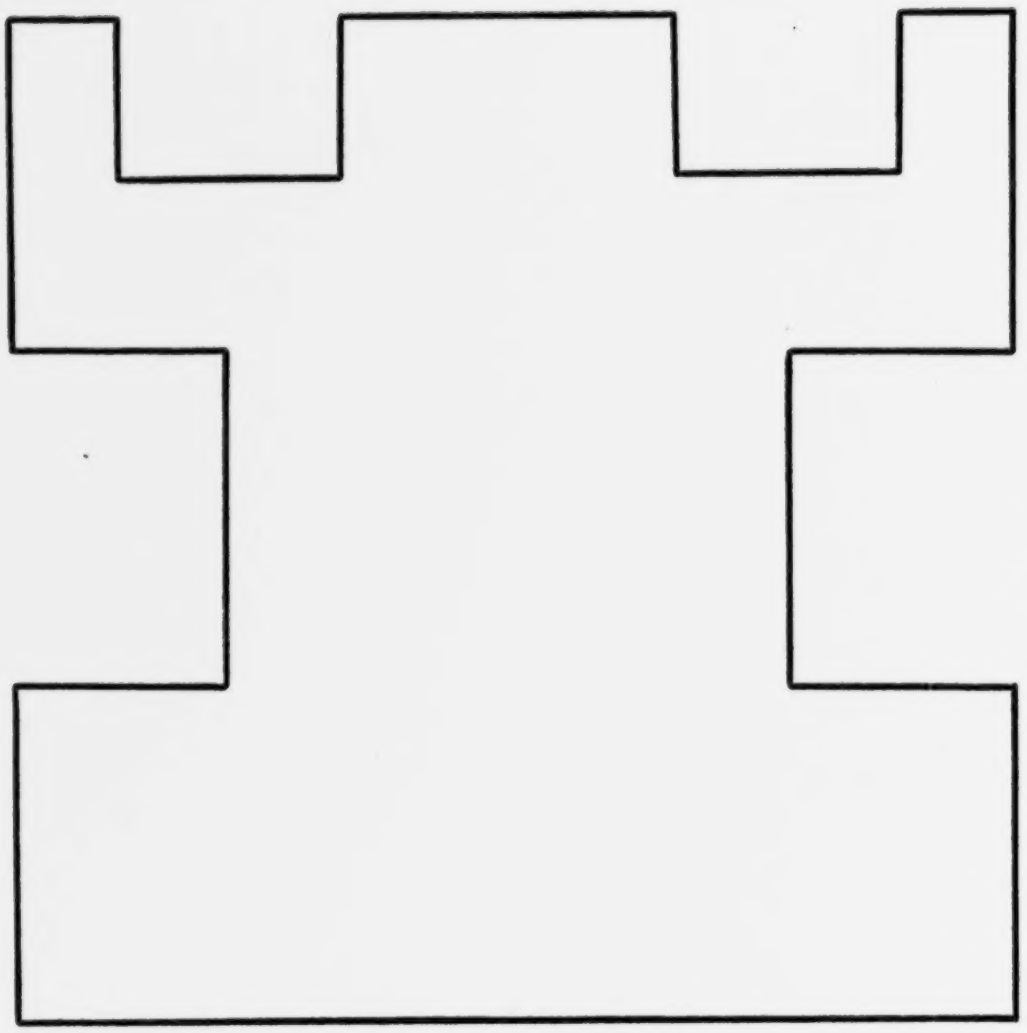

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